

THIN FLEXIBLE SHEET SORPTION MATERIAL FOR THE REMOVAL OF OIL FROM OIL SPILLS

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EXEMPLARY CLAIMS- Apparatus for collecting oil from oil-contaminated water or land areas, characterised by the following structural combination: the apparatus includes at least one film or sheet of sorbent material; the film is thin and flexible; the film is suitable for being extended onto the oil-contaminated water surface or area to be protected; at least one of the two principal surfaces of the film is oleophilic and hydrophobic; the film includes many apertures therethrough; and the apertures in the film are suitable for admitting the passage of oil from one to the other of the said two principal surfaces.; Apparatus of claim 1, further characterised in that: the flexible film is paper; and the paper is coated on one side thereof with an oleophilic and hydrophobic finish.; Apparatus of claim 1, further characterised in that: the sorbent material has a specific gravity less than that of water; whereby, when applied to the surface of the oil-contaminated open water, the sorbent material remains afloat before and after sorption of oil to its full capacity.; Apparatus of claim 3, further characterised in that: the oleophilic and hydrophobic surface, when laterally extended in use, presents texture irregularities; and the irregularities are suitable for enhancing the degree of sorption of oil onto the surface.; Apparatus of claim 1, further characterised in that the apertures are formed by making many small pierces through the flexible film.; Apparatus of claim 1, further characterised in that the apertures are formed by making many small slits through the flexible film.; Apparatus of claim 1, further characterised in that the flexible film is composed essentially of an olefinic polymer.; Apparatus of claim 1, further characterised in that the flexible film is composed essentially of polychethylene.

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